

STATISTICS PRESS NOTICE – Excess mortality and Covid-19 related deaths in Northern Ireland: March 2020 to December 2022



9:30am Thursday 9 March 2023

The Northern Ireland Statistics and Research Agency (NISRA) has today published a report on excess mortality and Covid-19 related deaths in Northern Ireland up to December 2022.

This shows that there were an estimated 4,075 excess deaths from March 2020 to December 2022, 9.0% above expected levels. The figures also show that in the same period, there were 5,060 Covid-19 related deaths.

Excess deaths are the difference between actual deaths from all causes in a period minus the expected number of deaths based on the average deaths for the same period over the previous five years; therefore, no individual death can be assigned as being an excess death. Last year, excess deaths were highest in July and December 2022. Deaths were below expected levels in January/February and September 2022.

The number of Covid-19 related deaths in hospital (3,536) was more than three times larger than estimated excess deaths in hospitals (1,056). The majority of Covid-19 related deaths (69.9%) occurred in hospital. In contrast, estimates of excess deaths at home formed the majority of overall excess deaths (3,176 or 77.9% of 4,075).

Armagh City, Banbridge & Craigavon LGD had the largest estimate of excess deaths (523), accounting for 12.8% of the 4,075 excess deaths in Northern Ireland. It had also the highest excess deaths as a proportion of expected deaths (11.4%); Belfast LGD had the lowest proportion (4.5%).

Excess deaths were higher in rural areas (11.9% compared to urban areas (7.4% above expected levels); excess deaths in rural areas (1,572) outnumbered its Covid-19 related deaths (1,472).

From March 2020 to September 2022, the number of deaths where Covid-19 was found to be the underlying cause (4,028) was higher than excess mortality in this 31-month period (3,661). Noteworthy levels of excess deaths were found for diseases of the digestive system (342 or 16.0% above expected levels) and diabetes (156 or 26.2% above expected levels).

There were fewer deaths in hospitals, care homes and hospices during the pandemic (negative excess deaths) and more deaths at home and other settings for malignant neoplasms, dementia and Alzheimer's disease, circulatory and respiratory diseases. Deaths caused by diseases of the digestive system went up in all settings, but most markedly at home (44.3%).

Excess deaths from diseases of the digestive system were markedly higher for females (17.8%), those aged 75 to 84 years (22.8%) and in the Southern and Western Health & Social Care Trusts (23.3% and 23.6% respectively).

Deaths due to dementia and Alzheimer's disease were below expected levels in urban areas (-4.3%) and above expected levels in rural and mixed urban/rural areas (9.2%).

NISRA

March 2023

NOTES TO EDITORS

1. The full report and detailed tables are available at: <https://www.nisra.gov.uk/publications/excess-mortality-covid-19-related-deaths-december-2022>
2. Statistics on weekly deaths registered in Northern Ireland can be found at: <https://www.nisra.gov.uk/statistics/death-statistics/weekly-death-registrations-northern-ireland>
3. All media queries to Department of Finance Press Office at dof.pressoffice@finance-ni.gov.uk. The Executive Information Service operates an out-of-hours service **for media enquiries only** between 1800hrs and 0800hrs Monday to Friday and at weekends and public holidays. The duty press officer can be contacted on 028 9037 8110.
4. These provisional statistics are based on death registration information collected by the General Register Office. The occurrence-based statistics (to end December 2022) take account of registrations up to 22 February 2023, to allow for delays in death registrations.
5. Excess mortality can be used to measure of the impact of the Covid-19 pandemic, as it does not rely on the availability or interpretation of the (primary and secondary) causes of death. It captures deaths from all causes, which may be related to a range of factors associated with the pandemic, for example, changes in the availability or uptake of health care services including screening and diagnosing, or the impact of 'lock-down' on people's mental health. Some of these effects may take months or years to be fully understood.
6. Excess mortality is the difference between actual deaths from all causes in a period minus the expected number of deaths, which is based on the number of deaths in the previous five years. It is therefore a mathematical concept; it is not possible to identify if an individual death was an excess death. In contrast, the analysis of Covid-19 related deaths to which this report makes comparisons, is based on individual deaths where Covid-19 was included on the death certificate. These cannot be automatically classed as excess deaths. Therefore, the two analyses should not be combined or differenced as this will not yield valid conclusions.
7. Covid-19 related deaths are all deaths where Covid-19 was mentioned on the death certificate by the doctor who certified the death, whether or not Covid-19 was the primary underlying cause of death. The figures include cases where the doctor noted that there was suspected or probable coronavirus infection involved in the death.
8. The underlying cause for a relatively large number of deaths that occurred in the last three months of 2022 was not available at time of analysis, therefore the analysis of excess mortality by underlying cause of death covers a shorter 31-month period up to September 2022.
9. This report was created within the Administrative Data Research Northern Ireland (ADR NI), a partnership between the Administrative Data Research Centre Northern Ireland (ADRC NI), and the Northern Ireland Statistics and Research Agency (NISRA). Together they support the acquisition, linking and analysis of administrative data sets, developing cutting-edge research to improve knowledge, policymaking and public service delivery.
10. Further information on the statistics provided in this publication can be obtained from NISRA Customer Services at:

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